

REMARKS/ARGUMENT

New claims 26-33 have been added. Claims 26, 27 and 28 are composition claims which are based on the formulation of Example 4. As described in Example 4 a sizing composition of starch, NovaCote® PS2 and AMRES® was used. NovaCote® PS2 is a styrene-acrylate copolymer dispersion in an ammonium SMA solution (see Paragraph [21]). AMRES® is a polyamidoamine-epichlorohydrin resin (see Paragraph [22]). Method claims 29, 30 and 31 and product claims 32, 33 and 34 both depend on claims 26, 27 and 28 respectively for the definition of the composition. These claims find support, *inter alia*, in the original claims (see especially claims 2, 6 and 7), in paragraphs [18], [21] and [22] and in Example 4. Entry of these new claims is requested.

Claims 17, 19 and 24 were rejected under the second paragraph of 35 USC 112, as being indefinite. The claims were rejected because they embraced non-elected subject matter. This rejection is respectfully traversed.

Claims 17, 19 and 24 have been cancelled. The newly presented claims are directed to the elected species. In the claims, the film-forming binder is starch, the anionic polymer is a hydrolyzed copolymer of styrene-maleic anhydride; and the cationic monomer is polyamidoamine-epichlorohydrin. The claims further define the hydrolyzed copolymer of styrene-maleic anhydride as being in the form of its ammonium salt and as having a copolymer of styrene-acrylic ester dispersed therein.

Claims 13, 14, 18, 19 and 24 were rejected under 35 USC 102(b) as being anticipated by Burdick, US 6,359,040; while claims 17 and 25 were rejected under 35 USC 103(a) as being obvious over Burdick in view of Gray et al, US 3,297,657. These rejections are respectfully traversed.

All of the rejected claims have been canceled. The new claims are neither anticipated, nor obvious over the Burdick '040 patent, whether viewed alone or in combination with the Gray '657 patent.

Burdick '040 describes an aqueous composition comprising a first ionic polymer, generally an anionic polymer and a viscosity promoter having a net ionic charge opposite to that of the ionic polymer, generally comprising a cationic polymer. The patent alludes to the use of the described composition for the surface sizing of paper (see col. 3, lines 60 et seq.). Anionic polymers are identified at col. 9, lines 42-67; while cationic polymers are identified at the top of column 10 (see also col. 10, line 51 to col. 11, line 2). While SMA resins appear as an anionic polymer viscosity promoter at col. 11, lines 3-6), there is no mention or remote suggestion of using a hydrolyzed,

ammonium salt of SMA (with or without a dispersed polymer phase), particularly in combination with a polyamidoamine-epichlorohydrin resin. As demonstrated by the results presented in Example 4 of the pending application, this combination of ingredients is particularly effective as a surface size, exhibiting a combination of both superior hydrophobicity (as measured by HST) and excellent surface integrity (as measured by Adams Wet Rub). Such a combination of properties is not suggested by the cited references.

On the basis of the forgoing, applicants request reconsideration of the pending claims.

Respectfully submitted,


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